

ABSTRACT

A system for outputting a broadband signal outputs a number of input channel streams. The input channel streams first arrive at the system in a digital format. There the input channel streams are each directed to a modulator circuit. Each particular modulator circuit produces a digital upconverted signal for the associated channel streams. The outputs of the modulators are coupled to a summer circuit. Accordingly the summer circuit digitally sums the outputs of the modulator circuits. The summer circuit is coupled to a digital to analog converter (DAC). The DAC produces an analog signal from the digitally summed output of the summer circuit. The DAC is in turn coupled to an upconverter. The upconverter upconverts the analog output of the DAC into an output signal centered on a particular frequency.